



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,303	10/19/2000	Ann Kerstin B.K. Lindell	AC02736US	5740

7590 05/23/2005

Joan M McGillicuddy
Akzo Nobel Inc
Intellectual Property Department
7 Livingstone Avenue
Dobbs Ferry, NY 10522-3408

EXAMINER

FLETCHER III, WILLIAM P

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/692,303

Applicant(s)

LINDELL ET AL.

Examiner

William P. Fletcher III

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9, 11-14, 16 and 17 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 0517-3
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on 3 May 2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

2. The indicated allowability of claims 6-17, in the Office action mailed 18 May 2004, is withdrawn in view of the newly discovered reference(s) to Karim et al. (US 6,057,382 A). Rejections based on the newly cited reference(s) follow.

3. To clarify the record at this point in the prosecution, claims 1-17 remain pending in this application, of which claims 1-5 remain withdrawn from consideration as being directed to a non-elected invention.

Claim Rejections - 35 USC § 103

Art Unit: 1762

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 6-9, 11-14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karim et al. (US 6,057,382 A).**

Karim teaches a process for coating a non-tacky film on a surface. Applicant is referred to abstract; 2:66-10:26; 11:30-13:40; and 14:45-15:13). The process comprises applying a radiation-curable, hot-melt composition comprising a radiation-curable resin to the substrate and curing the hot-melt composition to a non-tacky coating solely by exposing the coated substrate to ultraviolet radiation. It is the examiner's position that ultraviolet radiation is a form of electromagnetic radiation having a wavelength of less-than-or-equal-to 500 nm. Although recited by the claims as optional, Karim's composition additionally comprises 0-25 wt.-% of a hydroxyfunctional resin or oligomer, 0.01-10 wt.-% of a photoinitiator, as well as fillers and additives. Karim further teaches heating the radiation-curable composition at two points during

Art Unit: 1762

the process: heating to 121°C during preparation of the composition just prior to application and heating from about 50°C to about 177°C for a post-cure bake. The point 121°C falls within the range of 40-150°C recited by claims 6 and 16. The range of about 50°C to about 177°C overlaps all temperature ranges claimed. In the case where the claimed ranges overlap ranges disclosed by the prior art, a *prima facie* case of obviousness exists. See MPEP 2144.05(I). Since applicant's claimed heating step may be performed at any point during the process, both disclosures of heating by Karim read on this step in independent claims 6 and 16.

Karim does not explicitly state that the radiation-curable composition has a viscosity in the range of 15 to 10,000 mPa·s in the temperature range from 40 to 150°C. Nevertheless, Karim does teach adjusting the viscosity of the radiation-curable composition and it is the examiner's position that the viscosity of a coating composition is a result-effective variable effecting coating characteristics of the film (10:16-26). For example, a coating composition must be viscous enough to remain coated on a substrate and to be easily manipulated during the coating process, without being viscous as to be unworkable or so flowable as to run off of the substrate. Further, while applicant discloses the claimed viscosity as 'preferable' and certain smaller ranges within the claimed range as 'optimum' (see pages 13-14 of the spec.), there is no evidence of record that the claimed viscosity is critical to giving some unexpected result(s). Consequently, absent evidence of unexpected results demonstrating the criticality of the claimed viscosity, it would have been obvious to one of ordinary skill in the art to modify the process of Karim so as to optimize the viscosity of the coating composition by routine experimentation. See MPEP 2144.05(II).

With respect to claims 7, 8, 12, and 13, Karim teaches that the coating may be applied to a wide variety of substrates including plastics, metal, ceramics, glass, and cellulosic materials. It is the examiner's position that these materials, especially cellulosic, are 'heat-sensitive' within the context of applicant's disclosure (see 15:15-22 of the spec.).

With respect to claims 9 and 14, Karim is silent with respect to the glass transition temperature of the resin. It is the examiner's position that the glass transition temperature is a result-effective variable. Glass transition temperature is a compositionally-dependent, physical property of a polymer or polymer composition (i.e., resin), describing a change of state of that polymer. As such, the composition of the polymer or polymer composition may be selected/controlled to give a desired glass transition temperature for a given application. Consequently, absent evidence of unexpected results demonstrating the criticality of the claimed glass transition temperature, it would have been obvious to one of ordinary skill in the art to modify the process of Karim so as to optimize the glass transition temperature of the resin coating composition by routine experimentation. See MPEP 2144.05(II).

With respect to claim 17, Karim discloses that the hot melt composition may comprise a UV-curable epoxy acrylate resin (2:66-4:40).

Allowable Subject Matter

7. Claims 10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The disclosure of Karim appears to be limited to the curable epoxy resin, ethylene vinyl acetate

Art Unit: 1762

copolymer, and hydroxylfunctional material. There is no teaching or suggestion, either in Karim or the prior art, to additionally utilize a polyesteracrylate resin.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The definitions of 'ultraviolet' and 'glass transition temperature' from *Hawley's Condensed Chemical Dictionary* are provided in support of the examiner's positions: (i) that UV radiation is electromagnetic radiation having a wavelength less-than-or-equal-to 500 nm; and (ii) that the glass transition temperature is a compositionally-dependent physical property of a polymer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 9 AM to 5 PM.

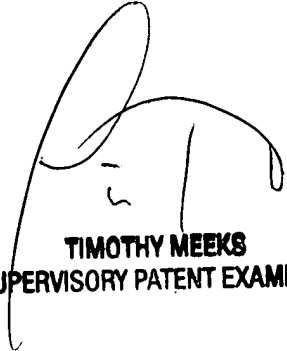
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPF 5/12/2005
William Phillip Fletcher III

Art Unit: 1762

Patent Examiner, USPTO
Art Unit 1762



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER